

# Transcription factor MYB46 (MYB46), Recombinant Protein



Cat RP05123

Size 0.02 mg (E-Coli)/ 0.02 mg (Yeast)/ 0.1 mg (E-Coli)/ 0.1 mg (Yeast)/ 0.02 mg (Baculovirus)/ 0.02 mg (Mammalian-Cell)/ 0.1

Species mg (Baculovirus)/ 1 mg (E-Coli)/ 1 mg (Yeast)/ 0.1 mg (Mammalian-Cell)/ 1 mg (Baculovirus)/ 0.5 mg (Mammalian-Cell)  
Arabidopsis thaliana (Mouse-ear cress)

## Full Product Name

Recombinant Arabidopsis thaliana Transcription factor MYB46 (MYB46)

## Product Gene Name

MYB46 recombinant protein

## Product Synonym Gene Name

MYB46

## Purity

Greater or equal to 85% purity as determined by SDS-PAGE. (lot specific)

## Sequence

MRKPEVAIAA STHQVKKMKK GLWSPEEDSK LMQYMLSNGQ GCWSDVAKNA GLQRCGKSCR LRWINYLRPD  
LKRGAFSPQE EDLIIRFHSI LGNRWSQIAA RLPGRDNEI KNFWNSTIKK RLKKMSDTSN LINNSSSSPN  
TASDSSNSA SSLDIKDIIG SFMSLQEQQF VNPSLTHIQT NNPFPTGNMI SHPCNDDFTP YVDGIYGVNA  
GVQGELYFPP LECEEGDWYN ANINNHDEL NTNGSGNAPE GMRPVEEFWD LDQLMNTEVP SFYFNFQSI

## Sequence Positions

1-280, Full length protein

## Format

Lyophilized or liquid (Format to be determined during the manufacturing process)

## Host

E Coli or Yeast or Baculovirus or Mammalian Cell

## Molecular Weight

31,541 Da

## Storage

Store at -20°C. For long-term storage, store at -20°C or -80°C. Store working aliquots at 4°C for up to one week.  
Repeated freezing and thawing is not recommended.

## Protein Family

Transcription factor

## NCBI Accession #

NP\_196791.1

## NCBI GI #

15239934

## NCBI GenBank Nucleotide #

NM\_121290.3

## NCBI GenID

FOR RESEARCH OR FURTHER MANUFACTURING USE ONLY

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Size 0.02 mg (E-Coli)/ 0.02 mg (Yeast)/ 0.1 mg (E-Coli)/ 0.1 mg (Yeast)/ 0.02 mg (Baculovirus)/ 0.02 mg (Mammalian-Cell)/ 0.1

831127 mg (Baculovirus)/ 1 mg (E-Coli)/ 1 mg (Yeast)/ 0.1 mg

**NCBI Official Full Name**  
(Mammalian-Cell)/ 1 mg (Baculovirus)/ 0.5 mg (Mammalian-Cell)

myb domain protein 46

## NCBI Official Symbol

MYB46

## NCBI Official Synonym Symbols

ATMYB46; myb domain protein 46; MYB DOMAIN PROTEIN 46; T24H18.40; T24H18\_40

## NCBI Protein Information

myb domain protein 46

## NCBI Summary

Encodes MYB46, member of the R2R3 factor gene family. Modulates Disease Susceptibility to Botrytis cinerea.

## UniProt Gene Name

MYB46

## UniProt Synonym Gene Names

AtMYB46

## UniProt Protein Name

Transcription factor MYB46

## UniProt Synonym Protein Names

Myb-related protein 46

## UniProt Primary Accession #

Q9LXV2

## UniProt Secondary Accession #

Q9ZTE1

## UniProt Related Accession #

Q9LXV2

## UniProt Comments

Transcription activator. Involved in the regulation of secondary wall biosynthesis in fibers and vessels (PubMed:17890373). Transcription activator of the mannan synthase CSLA9 that recognizes and binds to the DNA consensus sequence 5'-[AG][GT]T[AT]GGT[GA]-3' cis-regulatory element of CSLA9 promoter (PubMed:24243147). Transcription factor that acts as molecular switch in the NAC012/SND1-mediated transcriptional network regulating secondary wall biosynthesis. Is directly activated by NAC012/SND1. Functions redundantly with MYB83 in the transcriptional regulatory cascade leading to secondary wall formation in fibers and vessels (PubMed:19808805). Transcription activator that binds to the DNA consensus sequence 5'-ACC[AT]A[AC][TC]-3', designated as the secondary wall MYB-responsive element (SMRE). Regulates directly numerous transcription factors and a number of genes involved in secondary wall biosynthesis that contain SMRE elements in their promoters (PubMed:22197883). Is an obligate component of the transcriptional regulatory complex toward the commitment of secondary wall cellulose synthesis. Is required for functional expression of the three secondary wall CESA genes, CESA4, CESA7 and CESA8 (PubMed:23726771).

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